243 soils of the oak forest) prevail, and where the low rainfall is inimical to maize cultivation. Wheat is an important crop also on the well-drained soils of the Tertiary loess-covered plateau, on which chernoziom also develops, between the Prut and Siret. Here, below 1,000 feet, wheat is extensively grown, for here again the climate approximates to the steppe type. Grain began to be exported from the Danube plain depression in appreciable quantities only in 1833, the year of the great Russian famine, but in thirty years it had taken the place of grazing land and meadow over all the Black Earth region. The breaking up of the large estates, however, and the unsettled conditions during and since the War have checked the development of large-scale wheat production for export. After the War, the production of grain of all sorts fell off heavily as a result partly of a heavy tax imposed on grain export, partly of uneconomic farming due to the subdivision of estates, partly of the Government's taking over the marketing of wheat and rye and fixing prices for those commodities—a policy which discouraged production of these crops by the peasants, who concentrated on the production of maize, with barley and oats for home consumption in the wetter highlands. In any case, the yield of wheat in regions of steppe climate varies enormously from year to year with the winter and spring precipitation, and even during the period of normal progress in the decade preceding the War the export varied between nearly 2 million tons and less than 200,000. In spite of the rich soils, the yield per acre is small judged by western European standards.

BARLEY does very well as a peasant fodder crop in the dry south-east of the Old Kingdom, and is a crop of some importance in Transylvania (1¼ to 2 million hectares). In Moldavia and Oltenia under moister conditions, the high starch content makes it useful for brewing, and it is grown mainly on the larger estates.

248 HEMP AND FLAX are grown, the latter decreasingly, by the peasants for use in domestic textile industry. Imported cotton yarn has largely taken the place of linen.

245 As regards the vine—the best grapes for wine are produced in small holdings in the hill country of Transylvania (chiefly produced by the Saxon communities), Wallachia and

245

Moldavia, where the spring and copious early summer rains and the luminous late summer provide advantageous conditions. The use of American stocks, resistant to the phylloxera, has proved successful particularly in Moldavia. Bessarabia supplies about 40 per cent of the acreage under vines, and Wallachia about 23 per cent. The quality of the wine is much below the quality of the grapes, the peasant finding the production of tuica, a spirit simply distilled from the ubiquitous plum, a less difficult and exacting undertaking. There is no export of wine worth mentioning.

231 Before the Great War the rearing of animals, which had played an important part in the economy of Roumania in the early nineteenth century (providing an export to Turkey of sheep and horses from the lower Danube lands and of army horses to Prussia) had been giving way rapidly to grain cultivation. Since the War, however, the number of sheep, cattle and horses has increased, in spite of the great losses in the areas overrun by the enemy. The subdivision of the land into small holdings has been a factor in the increase of animals, for every peasant aims at having a few sheep, a couple of cows and a pig or two. In Transylvania, the development of cattle breeding had been scientifically encouraged, breeds peculiarly suited to various districts being improved. There are three types of permanent pasture in Roumania—the flood plain pastures of the Baltea and of the wider valleys in general, available for grazing in the winter and spring, the permanent meadows of the plains, which can be grazed only in the spring before the summer drought sets in, and the high pastures in the forest clearings, available during the summer months. The provision of winter fodder where the flood plains are not available is a serious problem, and one to which the Ministry of Agriculture is turning serious attention, for the cultivation of fodder crops is very little developed. Hay is harvested painfully one to three times in the year in the rich alpine pastures of the Carpathian valleys and is eked out in the peasant communities with maize stalks and straw. The small mountain cattle are the best milkers but of not much service for draught or for butchers' meat. The sheep is far more important in the peasant economy, providing cheese, wool for the domestic loom and mutton—for the most part dried. In Transylvania the cattle are mainly of the Hungarian steppe type with a

132 being common at this height (440 metres and upwards). July and August are the hottest months.

THE MEAN annual rainfall for Curtea de Argeş (taken over a period of nine years) is 672 mm. Precipitation occurs all the year round, but the rainiest months are May and June.

243 THE PRINCIPAL crop is maize, from which not only is the staple food "mamaliga" made, but the stems and leaves are used for animal fodder and bedding. Oats and rye are grown for fodder on the larger farms only. Wheat is not grown in the region. Soil and climate are suitable, but at present the peasant possesses very little machinery; harvesting would have to be done with a sickle or scythe and threshing with a flail. It is easier to buy such wheat as is required from the Wallachian Plain.

244 IN ADDITION to the above, every farm, however small, grows various vegetable crops: pumpkins for fodder, tomatoes, paprika, potatoes, onions, runner beans, cabbages, aubergines, often amongst the maize, sometimes as ground crops in the orchards.

246 CULTIVATED FODDER crops are grown only on the larger farms, and consist of clover, lucerne and sometimes a mixture of vetch and oats, and very occasionally turnips.

THE LOWER slopes of the hills form the natural hay meadows of the commune, but occasionally the grass of the orchard is used as rough pasture.

248 HEMP IS grown on the low-lying farms, usually as a boundary crop for the maize. Flax is also grown, but very few sunflowers.

245 AN IMPORTANT aspect of agriculture around Curtea de Argeş is fruit cultivation. Apples, pears and plums are the main crops, with occasional cherries. Every farm, however small, has some fruit trees, sometimes scattered over the whole holding, but more usually in a small orchard. Sufficient apples are grown to allow a considerable export trade to Bucharest. Plums are used for the manufacture of the alcoholic drink tuica in Curtea de Argeş. Recently plum-drying has been tried, and is already being taken up successfully by the more enterprising peasants. Walnuts also are gathered and sold.

243 The following were the average prices of the principal cereals at the port of Constantsa per ton during the years 1928–1931, according to the bulletin of the Constantsa Chamber of Commerce:

		1928	1929	1930	1931
Barley	...	5,900	4,580	2,430	1,900
Oats	...	3,400	2,440	1,800	1,520
Maize	...	5,280	4,010	2,600	1,800
Wheat	...	5,280	4,010	2,600	2,550

241 433 If it be remembered that the value of the agricultural production of Rumania constitutes about 60 to 65 per cent of the whole national revenue, it is easy to realize what a terrible strain such a sudden and brusque diminution in the resources of the country is likely to throw on the entire structure of its economic and social life. For the period of 1926–28 the national revenue was computed at 171 milliard lei, of which 110 milliards were derived from agriculture. According to the *Argus* of February 13th, 1932, this last figure for 1931 had declined to 46.5 milliards.

245 Among the 613,614 hectares occupied by orchards and vineyards, some 209,321 hectares are planted with plum trees which yield an annual average crop of about 5 million quintals of fruit, the yields for the years 1928–30 being respectively 28, 9.5, and 14.6 quintals per hectare. The vine is also very extensively cultivated, 239,825 hectares being planted with it. In 1930 the amount of wine obtained from the grapes grown attained about 8,385,374 hectoliters, about half of which was produced in Bessarabia.

241 231 The position of the livestock population in a country of small farmsteads like Rumania is liable to exert a great influence on agriculture, for not only are horses and horned cattle used as draught animals, but their manure is the only kind of fertiliser applied to the fields, so that the gradual reconstitution of the livestock situation after the serious damages inflicted on it during the war is a reassuring sign. The recovery would have been much more rapid if the export taxes on cattle and meat had not discouraged the cattle breeders by unduly restraining exports. The following

241 however, be slightly deficient in grain, especially
133 in poor years.

[311] The hilly land of Transylvania and the Bucovina differs markedly from the plain. There is proportionately less arable and much more meadow, grazing and forest land. The soil is poor. Methods are not as primitive as in the plain land of the Old Kingdom, but over-crowding is more serious and output per head is consequently lower. Parts of this region are slightly deficient in grain. Though [146] the level of food consumption is low, the dietary is more varied than elsewhere in the country, less maize and more meat and dairy produce being eaten.

3. Crops

311 Of the total area of pre-war Rumania, of nearly 30 million hectares (116,000 sq. miles) and twice the area of England and Wales, about 13 million hectares, or 45 per cent. was arable. Permanent meadow, pasture and grazing occupied 14 per cent., while tree and bush crops accounted for a further 2 per cent. The remaining land was non-agricultural, forest and waste land.

243 A very high proportion of the arable—over 80 per cent.—was used for grain growing, principally maize, wheat and barley. Owing to low rainfall, use of poor seed and lack of fertilisers, yields were at a low level and fluctuated widely from year to year.

[439] Out of an average grain production of 12 million tons, 6 millions went into domestic human consumption and 1½ million were exported, the remainder going to fodder, seed and waste. Grain exports have always figured largely in the country's foreign trade. During the twenty years 1920 to 1939 they only once fell below a million tons, and in some years exceeded three million tons. In value, during the decade before the war, they formed, after petroleum products, the main item in exports.

241 No other category of crops compares with grain. Sown fodder crops took barely 5 per cent. of the arable, all other crops, including potatoes, fibres, oilseeds, tobacco and sugar beet, about 8 per cent. Peas, beans and oilseeds were grown in sufficient quantities to provide surpluses for export. Germany established two companies—Solagra in 1934 and Soya A.G. in 1940—which invested large sums in promoting oilseed cultivation. The area 249 under sunflower was raised only slightly, but that under soya rose from nil in 1933 to 103,000 ha. (254,000 acres) in 1939, but the greater part of both crops was located in Bessarabia which Rumania lost to the U.S.S.R. in 1940 (see below).

244 Production of potatoes, vegetables and sugar
247 beet was just sufficient for domestic consumption, but the tobacco crop did not quite meet requirements. Tobacco production had fallen from 20,000 tons in the late nineteen-twenties to 12,000 tons in the years just prior to the war.

245 Fruit production was undeveloped and there was little organised marketing and processing. Plums were the main crop, but three-quarters of the output was used for making brandy. Apples and other kinds of fruit, and walnuts, were produced in fair quantities, but exports were insignificant, and, owing to low quality and the lack of standardisation, there were no prospects of development.

[7a]

342 712 The stairway, about 1.25 meters wide made of massive logs, is generally on the inside of the buildings; when it is located on the outside it leads unto the wooden balcony. The exterior is white-washed. In addition, the surface is decorated with molded bands [531] around each story division. There may also be a vertical division, thus creating a number of large panels. While these areas are symmetrical, neither they nor the molded bands that enclose them have any relation to the placing of windows or pillars (Jänecke, 1918: 62-63).

342 [175] [563] In 1895 there still existed about 55,000 earth huts (bordei) which were inhabited by the poorest population, generally Gypsies (fig. 63). They are common in the Danubian plain. Over an excavation 1-3 meters deep is placed a gabled roof. The roof is made of boards over which earth is laid. Sometimes reeds are placed over the boards before the earthen cover is added. The entrance is on one of the gabled sides, generally with a southerly exposure, and a window is placed on each gable side (Jänecke, 1918: 4).

343 351 Farm Buildings. In the lowlands the buildings are arranged in no definite order; though generally the house is closest to the road. The corn-house (coşar) is either opposite to or at right angles to the house so that it can be watched. The yard and orchard are surrounded by a fence. The simplest fence is made of wickerwork between wooden poles. More often, however, it is made of boards [556] that have intricate excised designs (fig. 60). The wealthy people [563] may add an imposing gateway with a small door. Flower or vegetable [244] gardens are rare, and the latter are called bulgări, since they are [247] generally kept by immigrant Bulgarians who grow all the vegetables [245] for town consumption (Stratilescu, 1907: 233). The farmstead is surrounded by shady trees, and there is generally a plum orchard at the back of the farm buildings (Jänecke, 1918: 8-9).

[184] In the mountain regions the arrangement of the buildings in the yard differs from that of the lowlands. The stables and other buildings are arranged on the border of the yard in a horseshoe form to serve as protection for the house. The yard is usually very small, and has a strong high palisade with a massive gateway, the whole giving the farm a fortress-like appearance (the author points to the presence of bears in summer and wolves in winter) (Jänecke, 1918: 32-35).

343 [184] In the lowlands there are generally not many additional farm buildings in the yard, and this fact is correlated with the pattern of building additional annexes to the house, a more economical and practical procedure. Stables are of the simplest lathwork or wickerwork, covered with a straw roof. Sheds for the storage of straw, hay and cornstalks are absent, for the latter are stacked into tall round piles in the open. The baking oven for summer use, made of mud and bricks, has a hipped roof supported by four pillars.